

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (withdrawn) A method for producing a vaccine containing an immunogenic determinant, comprising the steps of:
 - a) exposing extra-cellular pathogenic organisms to stress-inducing stimuli which would induce the production of stress protein/antigenic peptide fragment complexes;
 - b) extracting the endogenous stress-induced products from the treated cells; and
 - c) using the extracted products as the immunogenic determinant in the preparation of the vaccine composition.
2. (withdrawn) The method as claimed in claim 1, wherein the active ingredient of the immunogenic determinant predominantly comprises one or more shock protein/antigenic peptide fragment complexes.
3. (withdrawn) The method as claimed in claim 1, wherein the stress-inducing stimulus is heat.
4. (withdrawn) The method as claimed in claim 3, wherein the pathogenic organism is heated to from 5 to 8°C above the normal temperature for cultivation of the organism.
5. (withdrawn) The method as claimed in claim 1, wherein the pathogenic organism is an extra-cellular procaryotic or protozoan species.
6. (withdrawn) The method as claimed in claim 1, wherein the pathogenic organism is a bacterial, protozoal or fungal species.

7. (withdrawn) The method as claimed in claim 1, wherein the immunogenic determinant is a mixture of heat shock protein/antigenic peptide fragment complexes.

8. (withdrawn) The method as claimed in claim 1, wherein the extra-cellular pathogenic organism has been modified to induce or enhance the induction of the synthesis of stress proteins.

9. (withdrawn) The method as claimed in claim 1, wherein the method is carried out in vitro.

10. (currently amended) A vaccine composition comprising ~~an immunogenic determinant, wherein the immunogenic determinant comprises~~ one or more complexes between a stress induced heat shock protein and an antigenic peptide fragment wherein said complex or complexes are obtained from the heat treatment of an extra-cellular a pathogenic organism selected from the group consisting of bacteria, protozoa and fungi.

11. (currently amended) A vaccine composition produced by the method comprising the steps of:

exposing a pathogenic organism selected from the group consisting of bacteria, protozoa and fungi to extra-cellular pathogenic organisms to stress inducing stimuli heat shock which results in would induce the production of stress heat shock protein/antigenic peptide fragment complexes by said organism;

extracting the endogenous stress induced products complexes from said organism to provide a vaccine composition comprising said extracted complexes. the treated cells; and

using the extracted products as the immunogenic determinant in the preparation of the vaccine composition.

12. (currently amended) ~~A~~ The vaccine composition as claimed in claim 10, wherein the composition comprises an adjuvant for the one or more complexes immunogenic determinant.

13. (previously presented) The vaccine composition as claimed in claim 10, ~~which is an aqueous composition~~ wherein the composition comprises an aqueous carrier.

14. (currently amended) A method for ~~treating~~ vaccinating an animal ~~with a vaccine directed to an extracellular pathogenic organism~~ against infection by a pathogenic organism selected from the group consisting of bacteria, protozoa and fungi comprising administering a pharmaceutically acceptable quantity of a vaccine composition as claimed in claim 10 sufficient to elicit an immune response in the animal to said pathogenic organism.

15. (withdrawn) A method for eliciting an immune response from an animal to infection by an intra-cellular pathogenic organism the method comprising:

administering a vaccine containing an immunogenic determinant, the immunogenic determinant being a stress protein/antigenic peptide fragment complex produced in situ from the intra-cellular pathogen, the synthesis of the complex being induced by external stress stimuli or by genetic modification of the pathogen so as to render its synthesis constitutive.

16. (new) The vaccine composition according to claim 10, wherein said complex or complexes are obtained from the heat treatment of a bacteria.

17. (new) The vaccine composition according to claim 11, wherein said complexes are obtained by exposing bacteria to heat shock.

18. (new) The method according to claim 14, wherein the animal is vaccinated against infection by a bacteria.